

Fig. 1

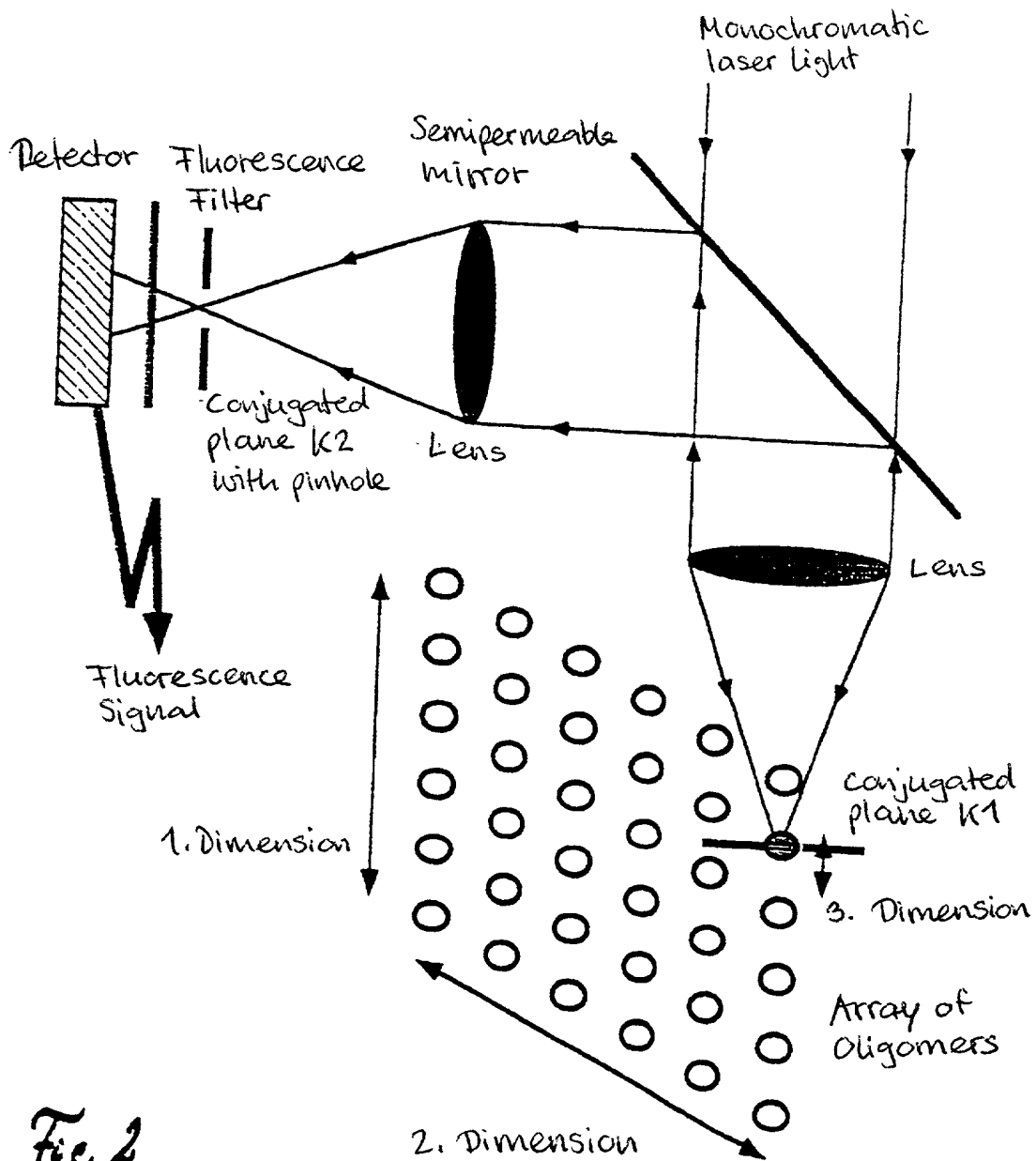


Fig. 2

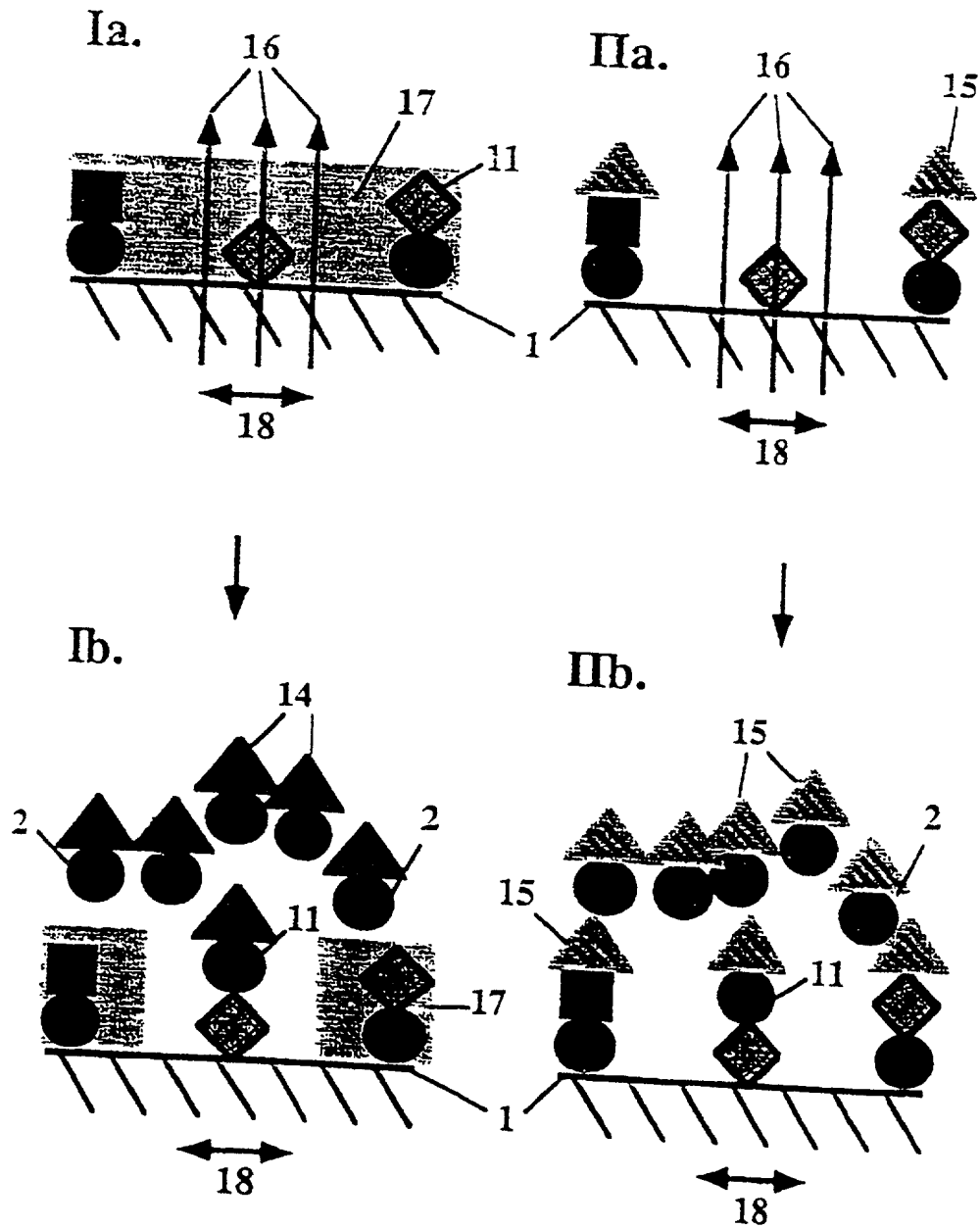


Fig. 3

IX

IX

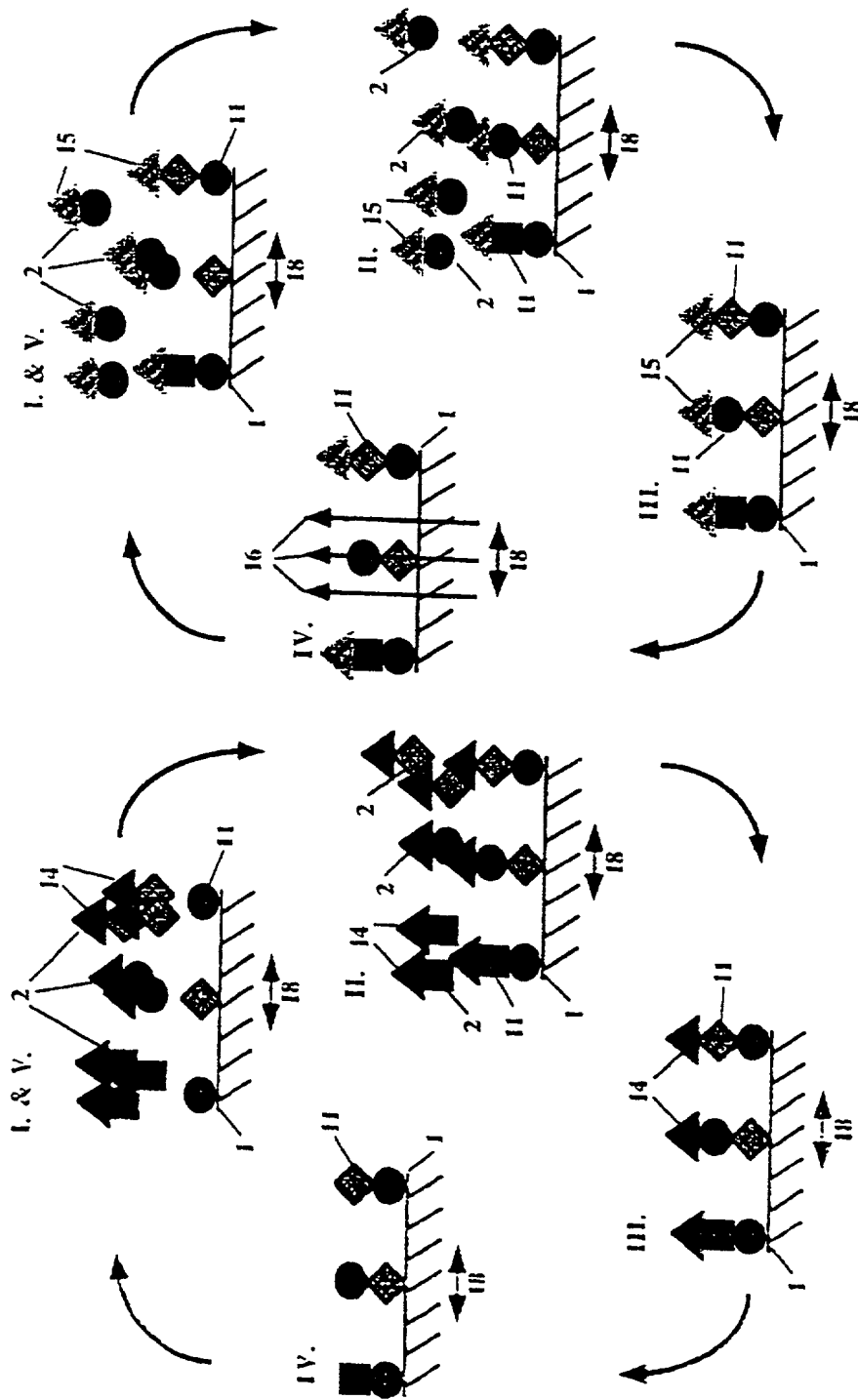


Fig. 4

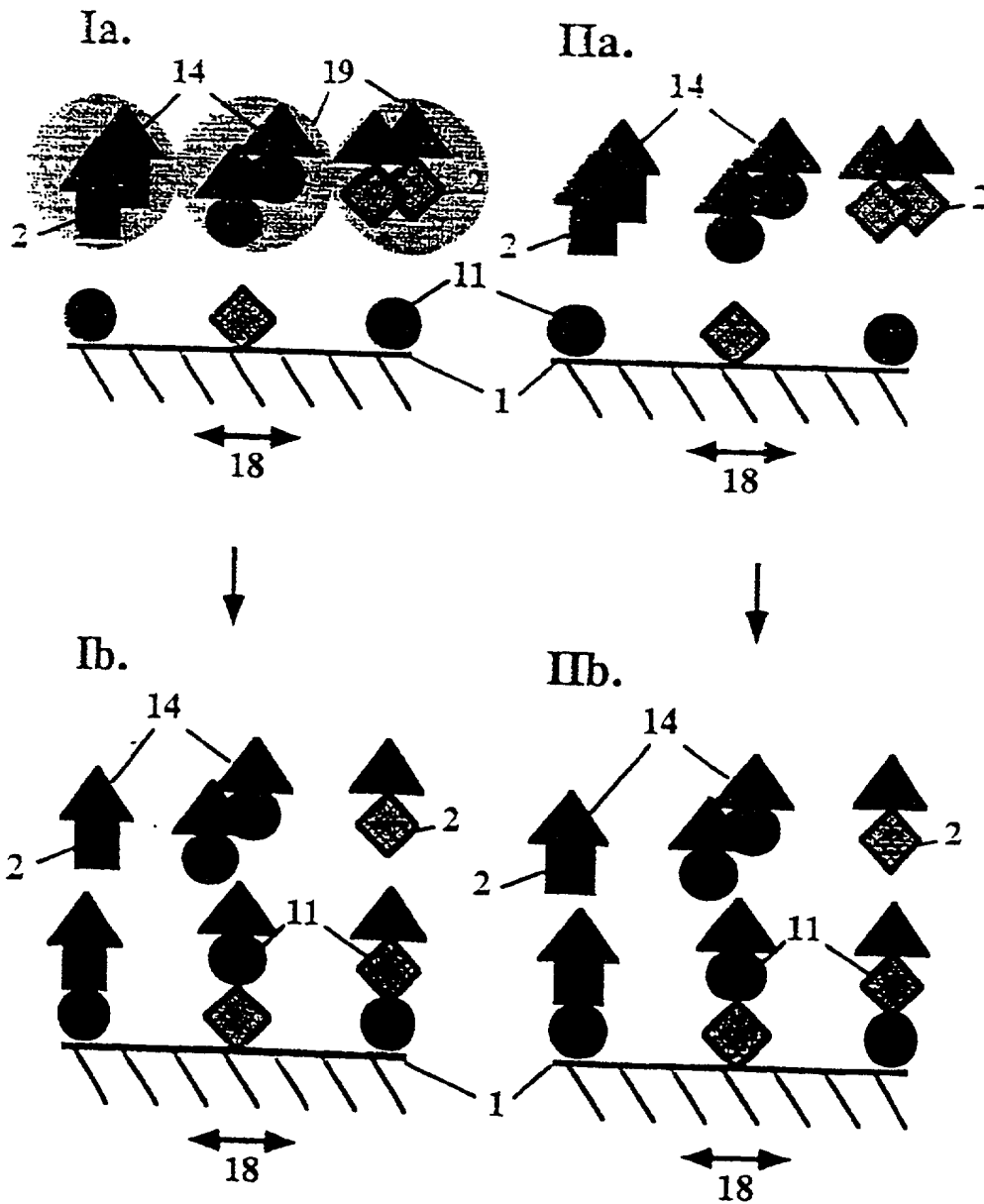
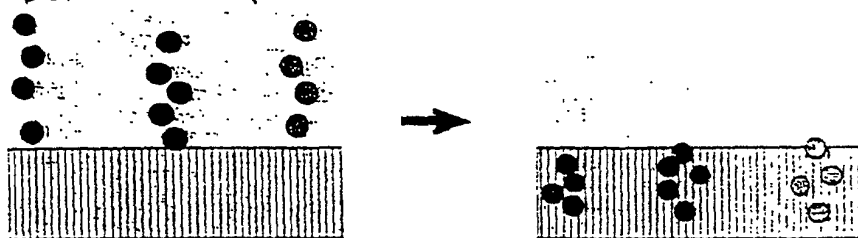


Fig. 5

6/20

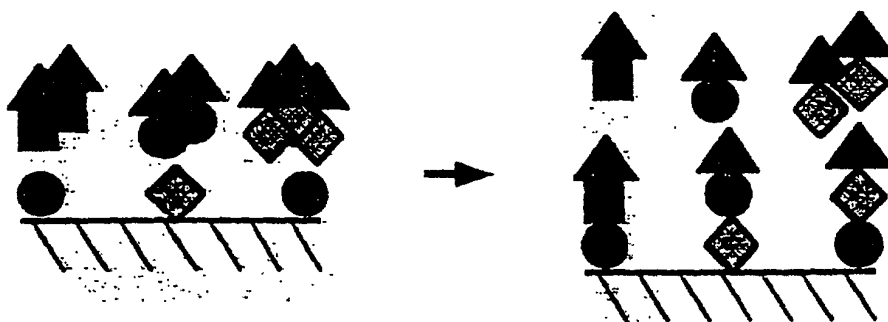
Demand on spotting of color



- Low diffusion rate of the large chromophors
- Rapidly evaporating solvent
- Absorbent paper

---

Demand on spotting of monomers for the combinatorial synthesis



- High diffusion rate of small monomers
- Very slowly evaporating solvent

Fig. 6

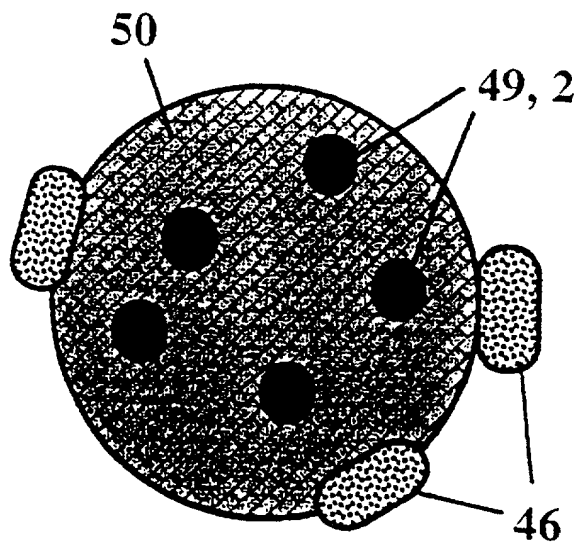
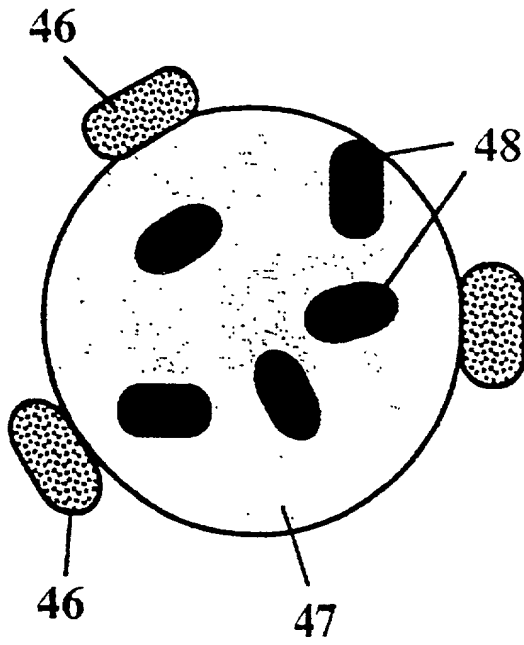


Fig. 7

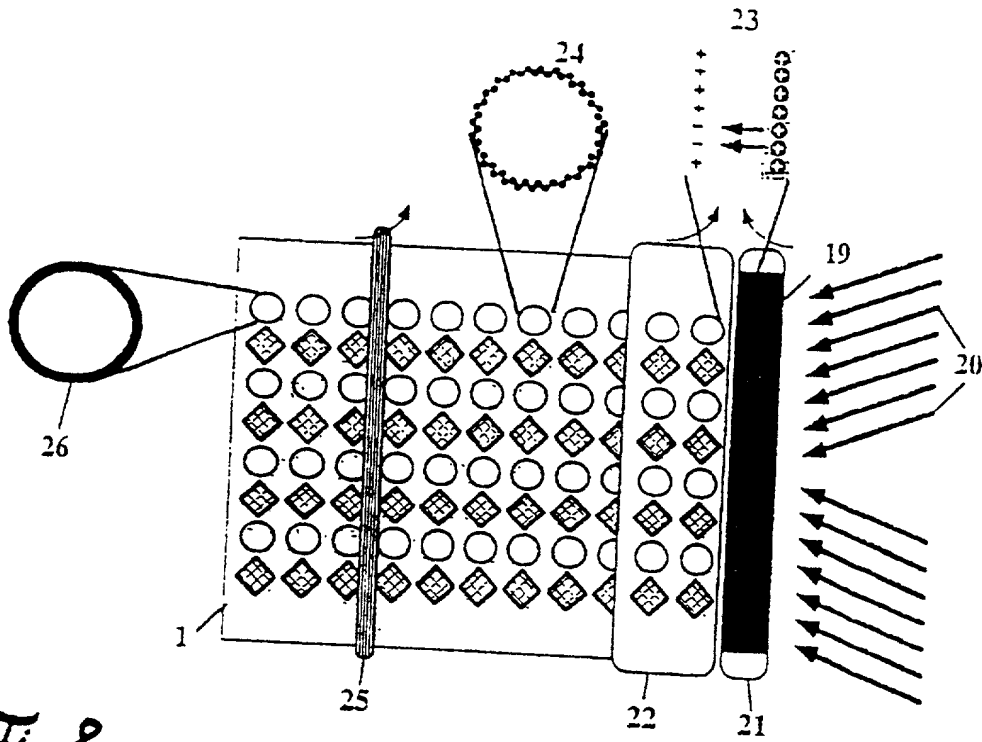


Fig. 8

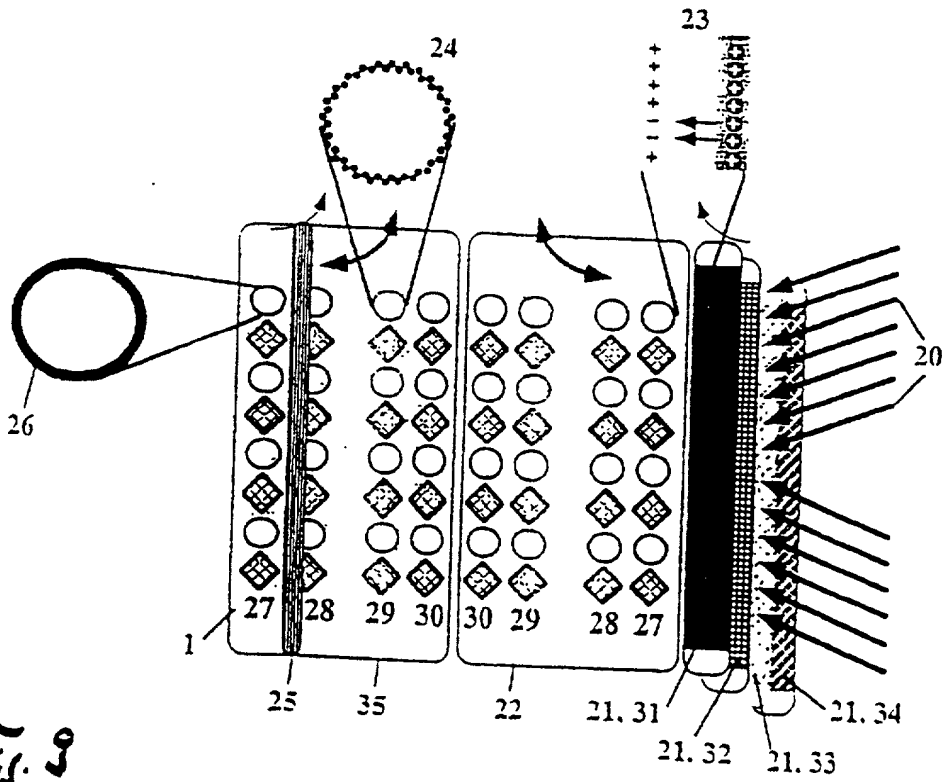
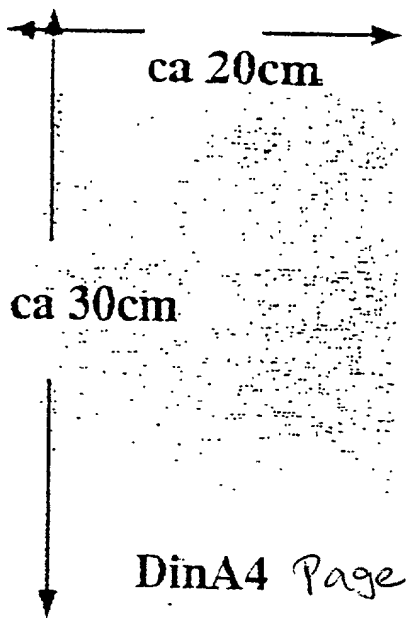


Fig. 9



9/20



600 dpi = 600 dots per inch

600 dpi = ca 1 dot all 40 $\mu$ m

1.200 dpi = ca 1 dot all 20 $\mu$ m

2.400 dpi = ca 1 dot all 10 $\mu$ m

4.800 dpi = ca 1 dot all 5 $\mu$ m

Dots per DinA4 Page:

600 dpi = ca 5.000 x 7.500 = ca 30 millions dots

1.200 dpi = ca 10.000 x 15.000 = ca 125 millions dots

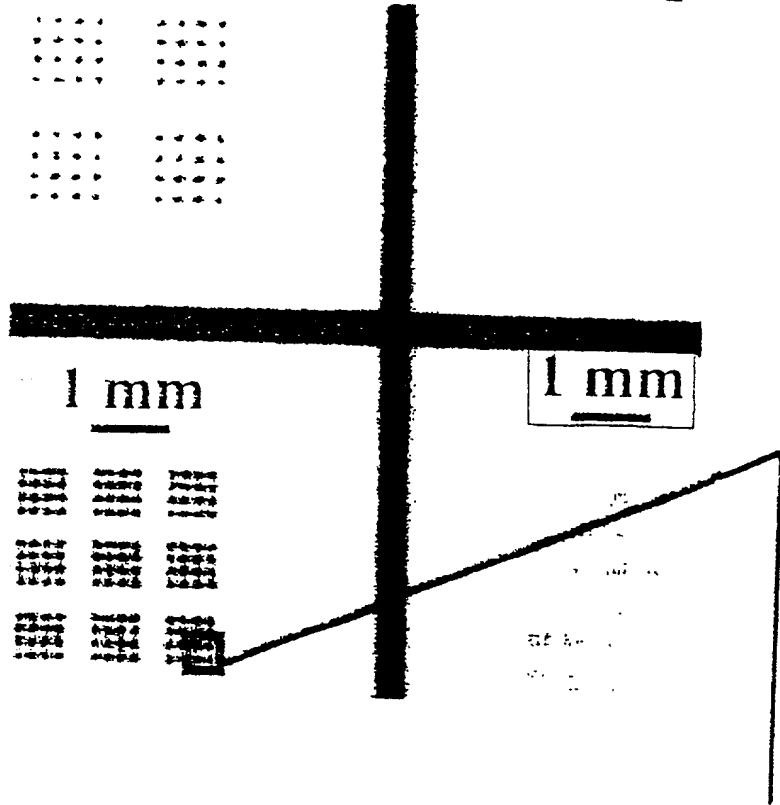
2.400 dpi = ca 20.000 x 30.000 = ca 500 millions dots

4.800 dpi = ca 40.000 x 60.000 = ca 2 milliards dots

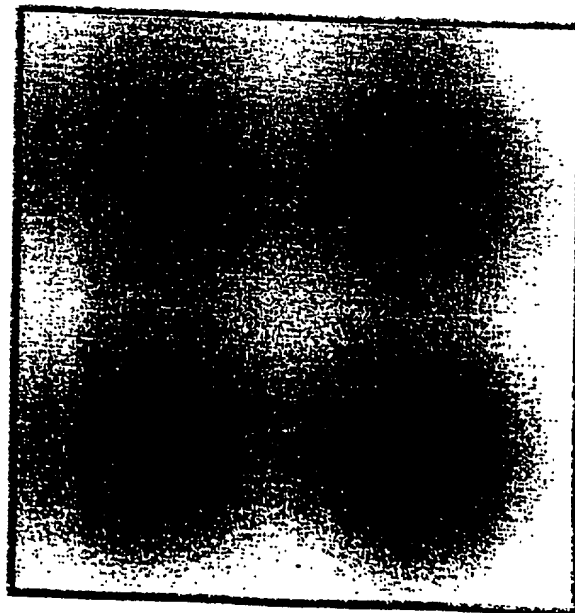
Fig. 10

10/20

Laser Printer with 600dpi



Scanner

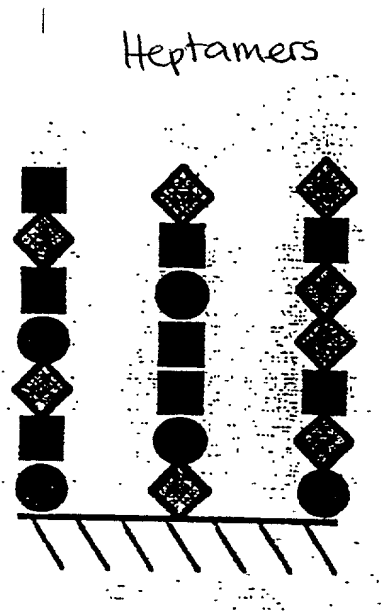


50  $\mu$ m

Fig. 11

0980688-061301

11/20



$20^1 = 20$  different amino acids

$20^2 = 400$  different dipeptides

$20^3 = 8.000$  different tripeptides

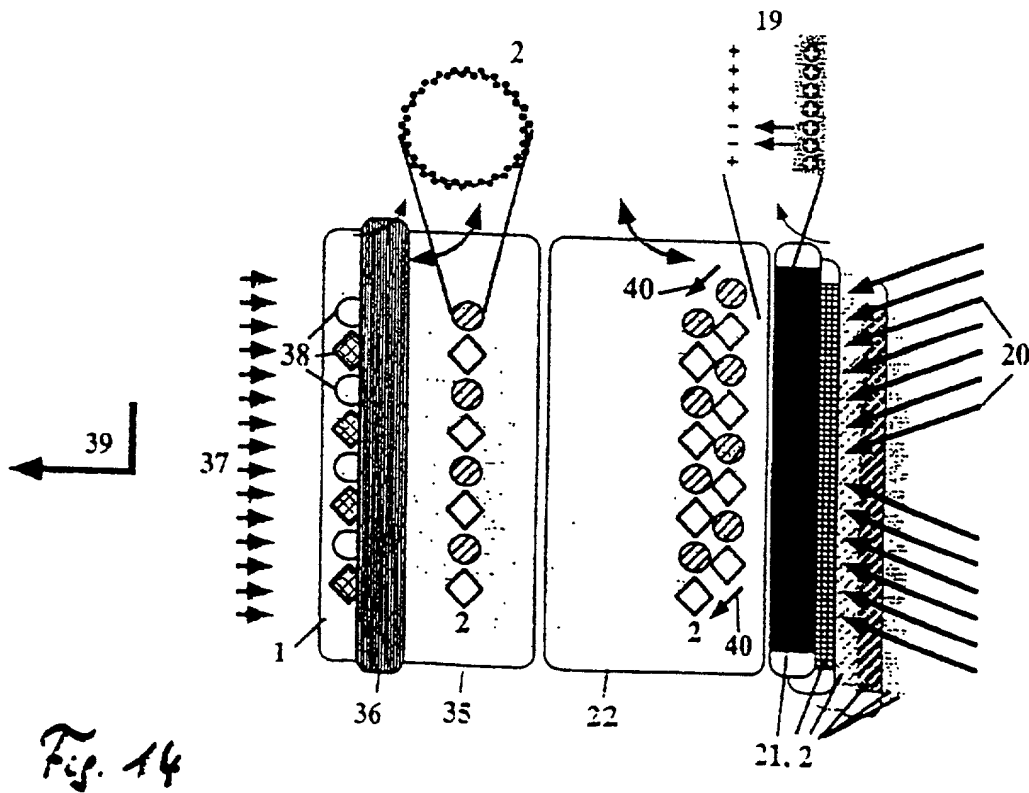
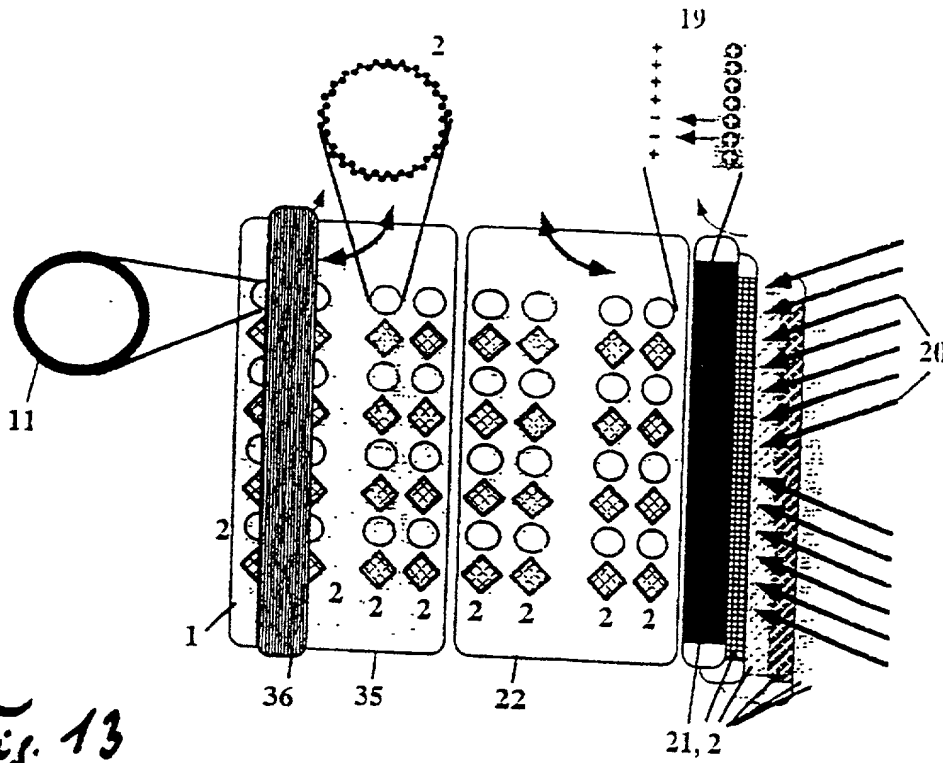
$20^4 = 160.000$  different tetrapeptides

$20^5 = 3,2$  millions different pentapeptides

$20^6 = 64$  millions different hexapeptides

$20^7 = 1.280$  millions different heptapeptides

Fig. 12



13/20



complete tripeptide library:

$$= 20^3 = 8.000 \text{ different peptide}$$



complete tetrapeptide library:

$$= 20^4 = 160.000 \text{ different peptide}$$



complete pentapeptide library:

$$= 20^5 = 3,2 \text{ millions different peptide}$$



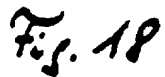
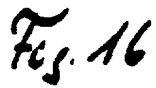
complete hexapeptide library:

$$= 20^6 = 64 \text{ millions different peptide}$$

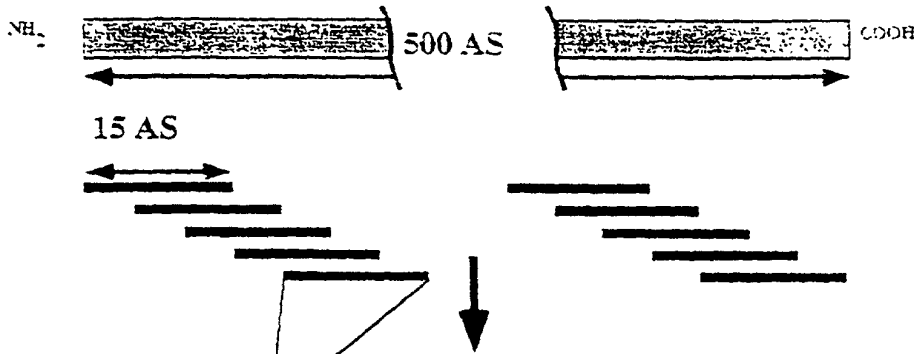
N = set amino acid position

X = Mixture of 20 different amino acid

Fig. 15



15/20



Gene1  
Gene2  
Gene3  
Gene4  
Gene5

Required peptides per Gene (ca 500 AS):  
= ca 100 x 15mere (per 5 AS added)

Number of human Genes:  
= ca 100.000

Required peptides to cover all Genes:  
= 100 x 100.000 = ca 10 millions

Fig. 17

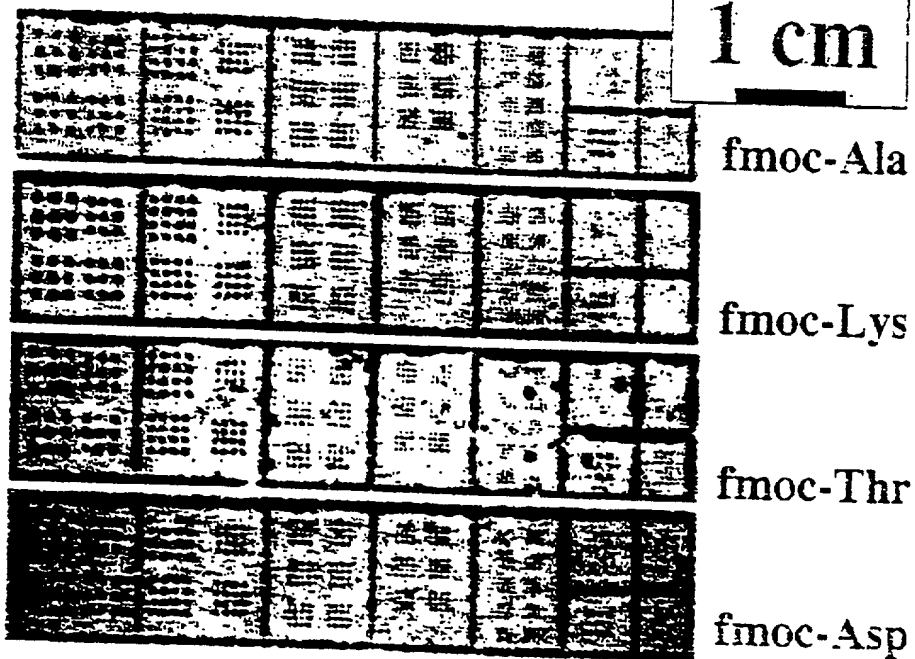
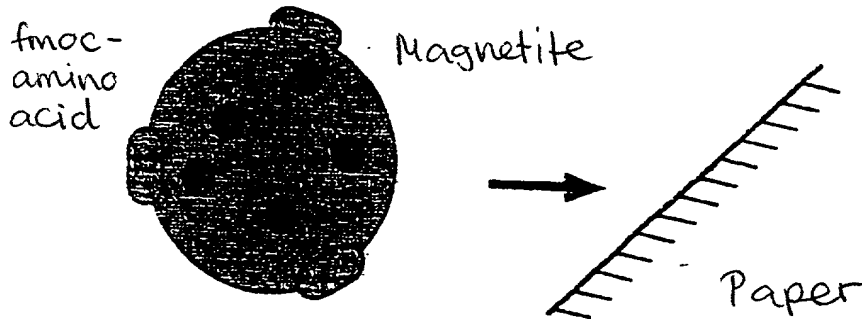
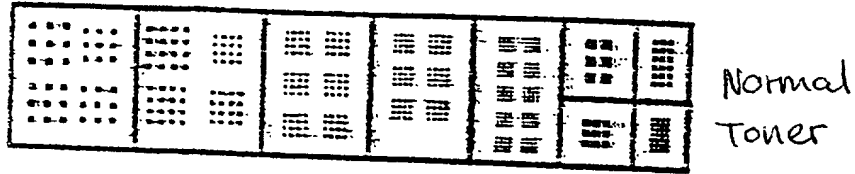


Fig. 19



A

Asp

Tyr ~ 6

Lys — 7

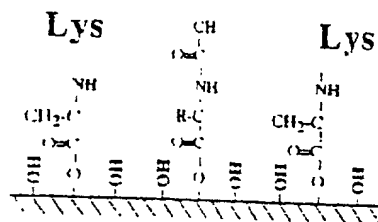
$$\text{Asp} \sim \varphi$$

Asp 9

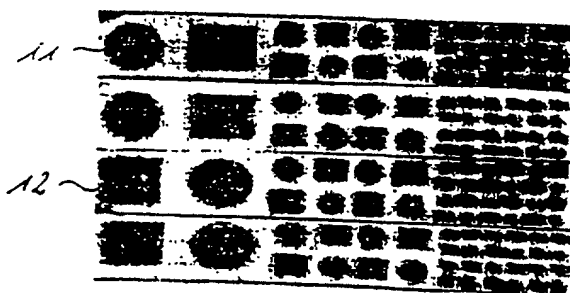
$$\text{Asp} \sim 10$$

Asp

Lys



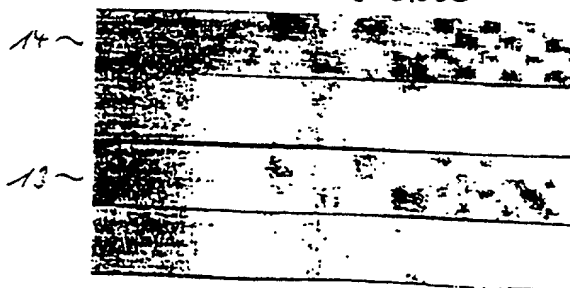
Front side



anti-Aktin antibody

anti-Aktin antibody

Back side



anti-Aktin antibody

anti-Aktin antibody

Fig. 20

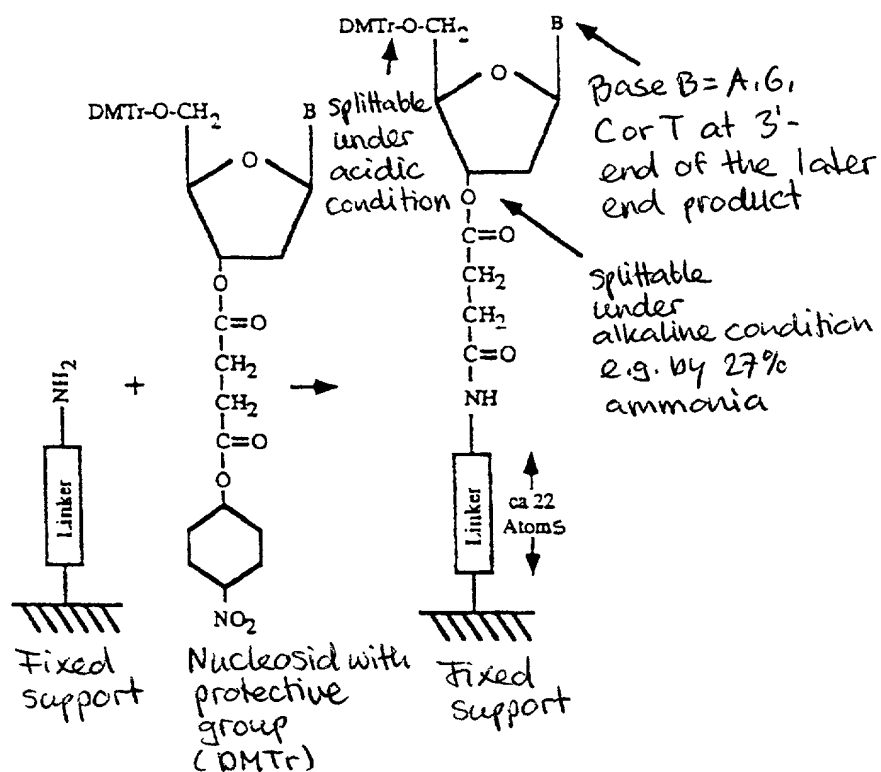
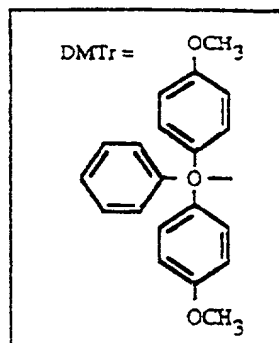
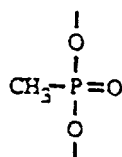
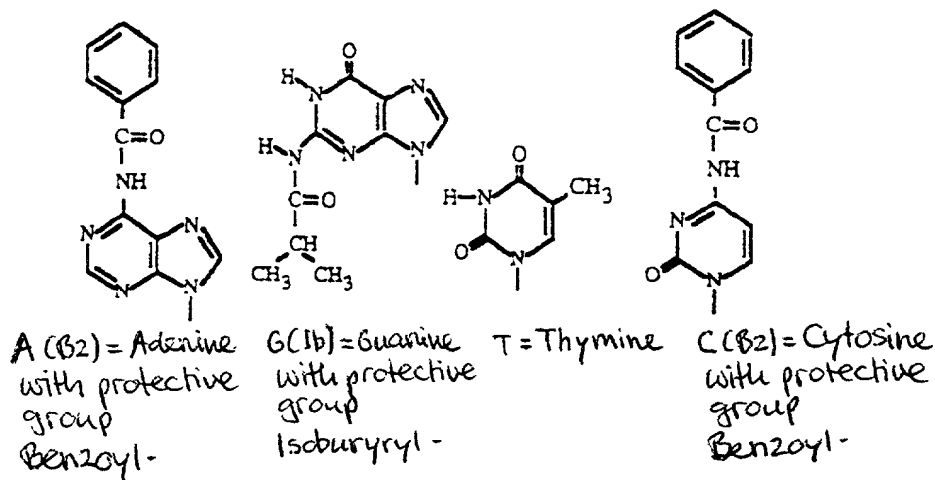
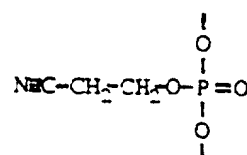


Fig. 21

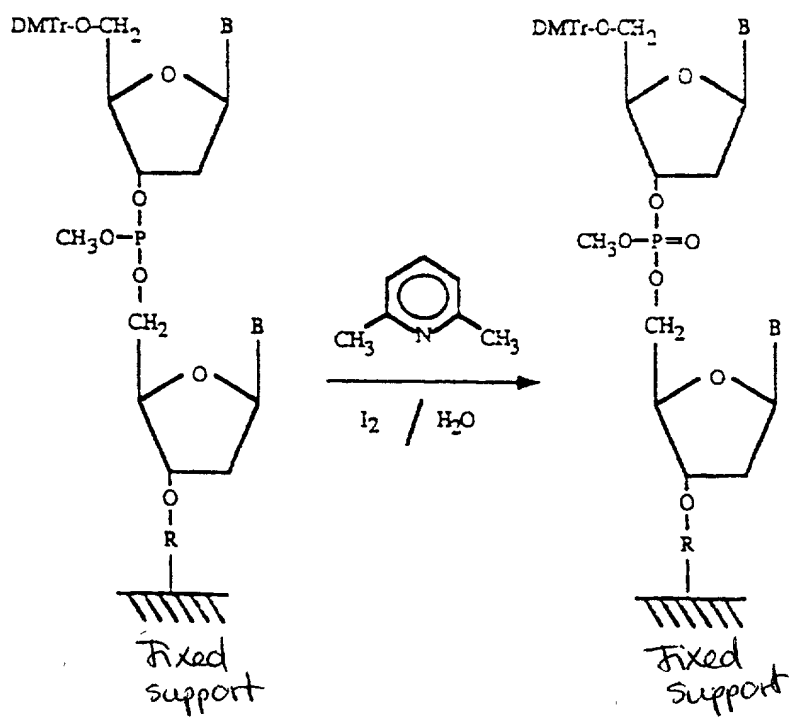
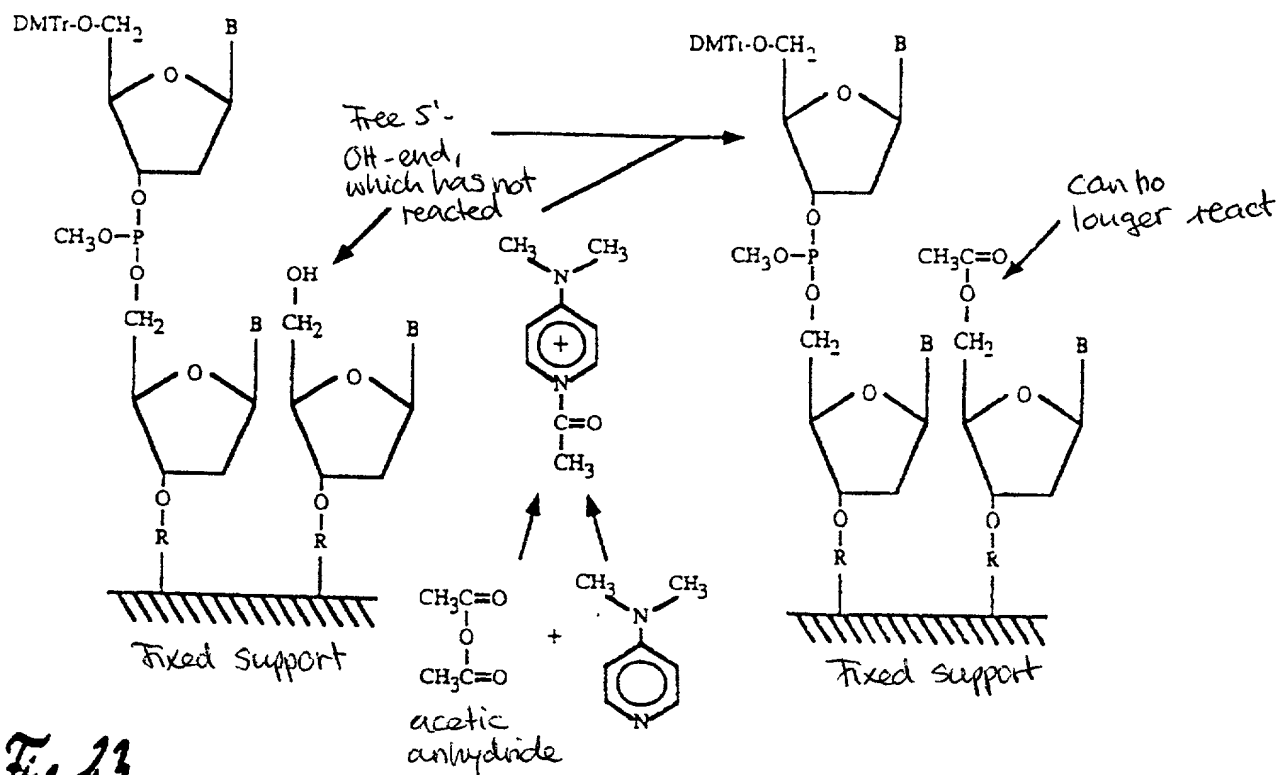


Phosphorus group with protective group Methoxy-



Phosphorus group with protective group Beta-cyanoethyl-

Fig. 22



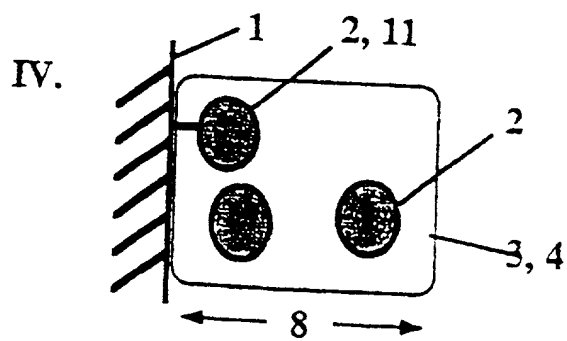
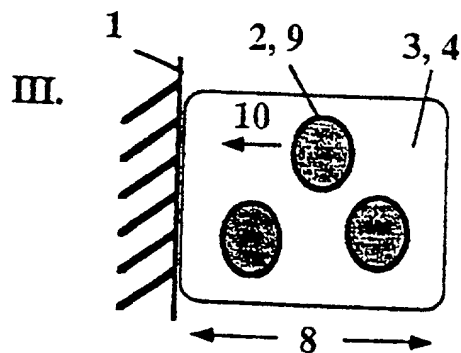
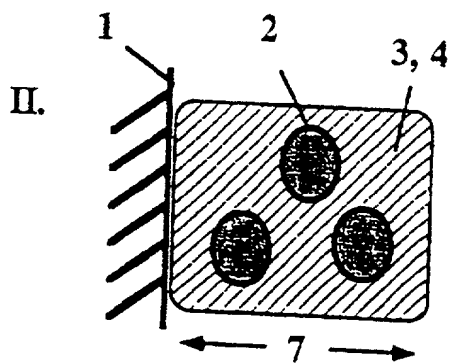
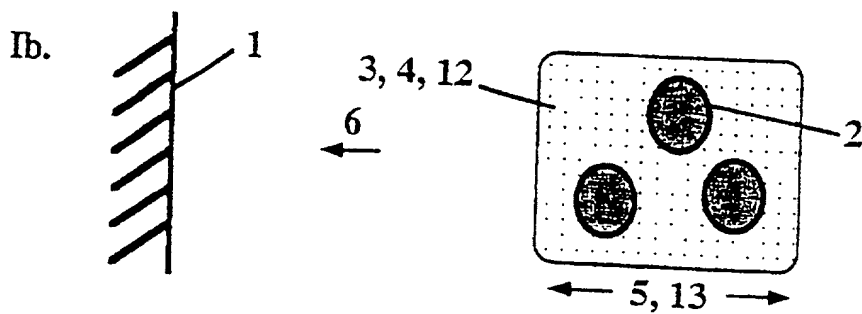
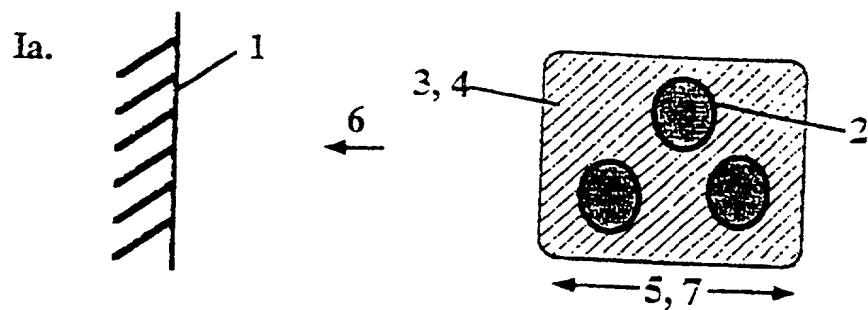


Fig. 25